

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first substrate and the second substrate, comprising:

a first transparent electrode provided on the first substrate;

a first wiring provided on the second substrate; ~~and~~

a conductive material connecting the first transparent electrode and the first wiring at a connection region; and

a driver IC connected to the first wiring at an IC mounting region of the second substrate;

wherein the first wiring comprises a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film, the conductive film being formed above the second substrate in an area other than at the connection region and other than at the IC mounting region, the metal oxide film being formed on the conductive film in the area and without any metal conductive layer interposed between the metal oxide film and the second substrate at the connection region and at the IC mounting region.

2. (Original) The liquid crystal device according to claim 1, wherein the conductive film is formed on an area other than the portion connecting with the conductive material.

3. (Currently Amended) The liquid crystal device according to claim 1, ~~further comprising a~~ wherein the driver IC provided on the second substrate ~~for driving~~ drives the liquid crystal;

~~wherein~~ the driver IC comprises an output side bump for supplying a signal, and
the output side bump is connected to the first wiring, ~~and~~
~~the conductive film is formed on an area other than the portion connecting with~~
~~the driver IC.~~

4. (Currently Amended) The liquid crystal device according to claim 1, further comprising a second wiring which is provided on the second substrate and which comprises a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film; ~~and~~

wherein [[a]] the driver IC provided on the second substrate ~~for driving~~ drives the liquid crystal;

~~wherein~~ the driver IC comprises an input side bump for inputting a signal,
the input side bump is connected to the second wiring, and
the conductive film included in the second wiring is formed on an area other than the portion connecting with the driver IC.

5. (Original) The liquid crystal device according to claim 4, further comprising a first protruding area which is provided in the vicinity of one edge of the second substrate and which does not overlap with the first substrate; and

a second protruding area which is provided in the vicinity of another edge, intersecting said one edge, of the second substrate, and which does not overlap with the first substrate;

wherein the driver IC is provided on the first protruding area, and

the second wiring is provided on the first protruding area and on the second protruding area.

6. (Original) The liquid crystal device according to claim 5, further comprising an external circuit substrate connected to the second wiring on the second protruding area;

wherein the conductive film included in the second wiring is formed on an area other than the portion connecting with the external circuit substrate.

7. (Currently Amended) The liquid crystal device according to claim 1, further comprising a second transparent electrode provided on the second substrate, ~~and~~ and wherein the ~~[[a]]~~ driver IC is connected to the second transparent electrode.

8. (Original) The liquid crystal device according to claim 7, further comprising a second wiring which is provided on the second substrate, which comprises a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film, and which is connected to the driver IC;

a first protruding area which is provided in the vicinity of one edge of the second substrate and which does not overlap with the first substrate; and

a second protruding area which is provided in the vicinity of another edge, intersecting said one edge, of the second substrate, and which does not overlap with the first substrate;

wherein the driver IC is provided on the first protruding area and comprises an input side bump for inputting a signal from the second wiring, and

the second wiring is provided on the first protruding area and on the second protruding area.

9. (Original) The liquid crystal device according to claim 8, wherein the conductive film included in the second wiring is formed on an area other than the portion connecting with the driver IC.

10. (Original) An electronic apparatus comprising a liquid crystal device according to claim 1.

11. (Currently Amended) A liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first substrate and the second substrate, comprising:

a first transparent electrode provided on the first substrate;

a first wiring provided on the second substrate;

a conductive material connecting the first transparent electrode and the first wiring at a connection region;

a second transparent electrode formed from a metal oxide film provided on the second substrate;

a driver IC connected to the second transparent electrode at an IC mounting region of the second substrate; and

a second wiring which is provided on the second substrate and which is connected to the second transparent electrode; wherein ~~at least one of the first and the second wirings~~ each comprise[[s]] [[a]] the metal oxide film of the second transparent electrode and a conductive film having a resistance lower than that of the metal oxide film, the conductive film being formed above the second substrate in an area other than at the connection region and other than at the IC mounting region, the metal oxide film being formed on the conductive film in the area and without any metal conductive layer interposed between the metal oxide film in the area and without any metal conductive layer interposed between the metal oxide film and the second substrate at the connection region and at the IC mounting region.

12. (Original) The liquid crystal device according to claim 11, further comprising a driver IC provided on the second substrate for driving the liquid crystal; wherein the driver IC comprises an output side bump for supplying a signal, and the output side bump is connected to the first or the second wiring.

13. (Currently Amended) The liquid crystal device according to claim 11, ~~further comprising an~~ wherein the external circuit substrate is configured to supplying signals to each of the first and the second wiring.

14. – 16. (Cancelled)

17. (Currently Amended) A method for manufacturing a liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first substrate and the second substrate, comprising:

a step of providing a first transparent electrode on the first substrate;
a step of providing a first wiring on the second substrate; and
a step of connecting the first transparent electrode and the first wiring by a conductive material at a connection region;

wherein the first wiring comprises a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film, the conductive film being formed above the second substrate in an area other than at the connection region and other than at the IC mounting region, the metal oxide film being formed on the conductive film in the area and without any metal conductive layer interposed between the metal oxide film and the second substrate at the connection region and at the IC mounting region.

18. - 19. (Cancelled)

20. (NEW) The liquid crystal device according to claim 1, wherein the metal oxide film is formed directly on the second substrate at the connection region and at the IC mounting region.

21. (NEW) The liquid crystal device according to claim 11, wherein the metal oxide film is formed directly on the second substrate at the connection region and at the IC mounting region.

22. (NEW) The method according to claim 17, wherein the metal oxide film is formed directly on the second substrate at the connection region and at the IC mounting region.

23. (NEW) A liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first substrate and the second substrate, comprising:

a first transparent electrode provided on the first substrate;

a first and second wiring provided on the second substrate, wherein the first and second wiring each comprise a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film;

a conductive material connecting the first transparent electrode and the first wiring; and

an external circuit substrate connected to the second wiring, wherein the conductive film included in the second wiring is formed on an area other than the portion connecting with the external circuit substrate.

24. (NEW) A liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first and the second substrate, comprising:

a first transparent electrode provided on the first substrate;

a first wiring provided on the second substrate;

a conductive material connecting the first transparent electrode and the first wiring;

a second wiring which is provided on the second substrate and which is connected to the second transparent electrode, wherein the first and the second wirings each comprise a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film; and

an external circuit substrate connected to the second wiring, wherein the conductive film included in the second wiring is formed on an area other than the portion connecting with the external circuit substrate.

25. (NEW) A method for manufacturing a liquid crystal device having a first substrate and a second substrate, which are disposed to oppose each other, and liquid crystal enclosed in a gap between the first substrate and the second substrate, comprising:

a step of providing a first transparent electrode on the first substrate;

a step of providing a first and second wiring on the second substrate, wherein the first and second wiring each comprise a metal oxide film and a conductive film having a resistance lower than that of the metal oxide film;

a step of providing an external circuit substrate that is connected to the second wiring, wherein the conductive film included in the second wiring is formed on an area other than the portion connecting with the external circuit substrate; and

a step of connecting the first transparent electrode and the first wiring by a conductive material.